Applicant: Yurino, et al. Serial No.: 09/459,712

Filed: December 13, 1999

Page: 2

AMENDMENT

Please amend the application as follows:

In the claims:

Please cancel claims 7 and 21, without prejudice.

Please replace claims 8, 9, 16, and 24 with amended claims 8, 9, 16, and 24 as follows:

- -- 8. (Amended) A method for detecting the degree of hybridization between a probe and a sample nucleic acid, the method comprising
- (a) providing a substrate on which each of a plurality of types of probes is separately immobilized on each different and separate position;
 - (b) providing a sample comprising a nucleic acid;
- (c) contacting the sample with the probe and detecting the amount of the probe at each position of the substrate and the amount of the sample nucleic acid hybridized to the probe, thereby detecting the degree of hybridization between the probe and the sample nucleic acid.
- 9. (Amended) A method for detecting the degree of hybridization between a nucleic acid probe and a sample nucleic acid, the method comprising
- (a) providing a substrate on which each of a plurality of types of nucleic acid probes is separately immobilized on each different and separate position;
 - (b) providing a sample comprising a nucleic acid;
- (c) contacting the sample with the nucleic acid probe and detecting the amount of the probe at each position of the substrate and the amount of the sample nucleic acid hybridized to the probe; and
- (d) producing a value representing the degree of hybridization between a nucleic acid probe and a sample nucleic acid by normalizing the difference between the amount of the probe and the amount of the sample nucleic acid hybridized to the probe with the amount of the probe.

Cl

Attorney's Docket

13452-004001 / PH-710US

Applicant: Yurino, et al. Serial No.: 09/459,712

Filed: December 13, 1999

Page: 3

SUB)

16. (Amended) A method for detecting the degree of hybridization between a probe and a sample comprising a biopolymer, the method comprising

- (a) providing a substrate on which each of a plurality of types of probes is separately immobilized on each different and separate position, wherein the probes are labeled with a first detectable label;
- (b) providing a sample comprising a biopolymer, wherein the biopolymer is labeled with a second detectable label;
- (c) contacting the sample with the probe and detecting the amount of the probe at each position of the substrate and the amount of the sample biopolymer bound to the probe; and
- (d) producing a value representing the degree of hybridization between a probe and a sample biopolymer by normalizing the difference between the amount of the probe and the amount of the sample biopolymer hybridized to the probe with the amount of the probe.

Suz

- 24. (Amended) A method for detecting the degree of hybridization between an oligonucleotide probe immobilized onto an array and a sample nucleic acid, the method comprising
- (a) providing a substrate on which each of a plurality of types of oligonucleotide probes is separately immobilized on each different and separate position to form an array, wherein the oligonucleotide probes are labeled with a first detectable label;
- (b) providing a sample comprising a nucleic acid, wherein the nucleic acids are labeled with a second detectable label;
- (c) contacting the sample with the probe and detecting the amount of the probe at each position of the substrate and the amount of the sample nucleic acid hybridized to the probe; and
- (d) producing a value representing the degree of hybridization between a probe and a sample by normalizing the difference between the amount of the probe and the amount of the sample nucleic acid hybridized to the probe with the amount of the probe. --